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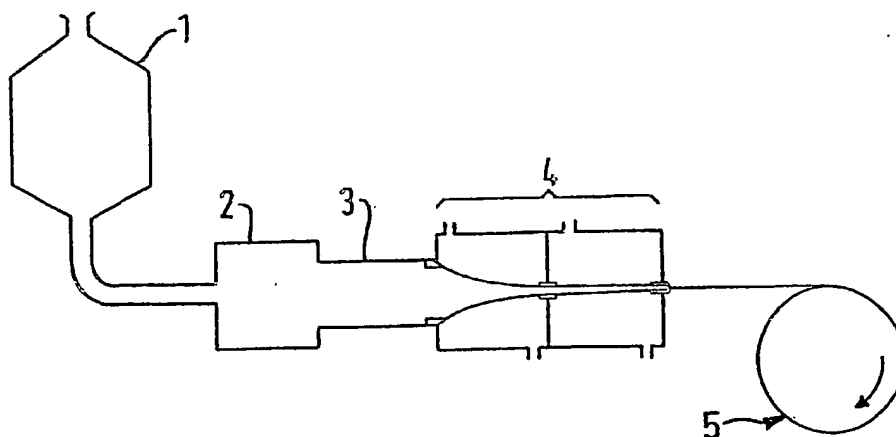
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(54) Title: APPARATUS AND METHOD FOR FORMING MATERIALS



(57) Abstract: The use of a starting solution to form a plurality of filler elements in a composite material is taught in this application. The starting solution comprises a miscible solution of at least one protein and a least one further compound, the plurality of filler elements being formed from the at least one further compound. Using this starting solution, further materials imparting different properties can be incorporated into the extruded proteins. Also disclosed is a method of forming a composite material containing a plurality of filler elements. This method comprises a first step of preparing a starting solution containing at least one protein and at least one further compound and a second step of inducing the starting solution to separate into a bulk phase and a minor phase. The apparatus has a storage compartment for storing the starting mixture, the starting solution and a phase separation compartment. In the phase separation compartment, the protein and the further compound of the composite forming mixture are phase separated into a bulk material containing a plurality of filler elements.



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